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THE SOUTHERN FOREST SURVEY

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The Southern Forest Survey, a part of the U. S. Forest Service organization established to make a nation-wide survey of timber resources, has been under way since January 1931. The object of this survey is threefold: (1) to give the present inventory of standing timber suitable for lumber, pulpwood, poles, posts, railroad ties, other wood products, -and in the Naval Survey Belt, - the amount of timber that is suitable for Naval Stores operation; (2) To ascertain the rate at which the supply of timber suitable for each of these uses is being increased through natural growth; and (3) To determine the rate at which the supply of timber in these stands is being depleted through industrial and other uses. Reliable data on these three phases of the survey work will make possible the formulation of a national plan of land and timber management and will give states, communities and industries the basic facts on which to lay plans for future development.

Figure 1 shows the geographic distribution of areas on which the field inventory of the Southern Forest Survey was completed prior to June 1, 1934. Table 1 shows by states the area surveyed prior to June 1, 1934, the area that according to present plans will have been covered by the field inventory by December 31, 1934, and also the area that is proposed for completion during the period January 1 to June 30, 1935.

Table 1

States	Area Covered by Field Inventory June 1, 1934	Area Covered by Field Inventory December 31, 1934	Area Covered by Field Inventory June 30, 1935
Mississippi	13,888,000	18,388,000	29,672,000
Louisiana	3,558,000	4,000,000	10,550,000
Alabama	---	4,000,000	4,000,000
Florida	8,878,000	16,000,000	16,000,000
Georgia	11,558,000	17,500,000	17,500,000
S. Carolina	640,000	4,000,000	4,000,000
Tenn. & Va.	858,000	2,000,000	2,000,000
Texas	---	---	8,456,000
	39,380,000	65,888,000	92,178,000

Field work on the timber inventory is being done by 19 field crews each of which is made up of three experienced timber curisers. These cruisers are systematically grid-ironing the areas to be covered by the Survey, and on quarter-acre sample plots taken every 660 feet, are carefully measuring the trees and are recording the number, size, volume, species, rate of growth of the trees and other

Fig. 1 - Forest Survey Progress Map

GULF OF MEXICO

ATLANTIC

- Area surveyed June 1, 1934
- " to be surveyed before Dec. 31, 1934
- " " " " June 30, 1935

data on the timber stand. Specialists on timber growth and timber depletion are assigned to growth and depletion studies in each of the areas covered by the Forest Survey. In the Naval Stores Belt of the Southeast, a special economic study of the gum naval stores industry is being made to determine facts of gum turpentine and rosin production, the number of producers and other pertinent data not heretofore available.

The office computation of the tremendous amount of field data gathered by these 19 field crews is being done by a trained staff of 11 statistical experts and computers. Full use is being made of efficient and computational methods and modern electric sorting and tabulating machines. In the office analysis of the field data that will be gathered before December 31, 1934, it is estimated that more than half a million tabulating machine cards will be required. The punching of data on these cards makes possible subsequent reanalysis of survey data for special reports and for release of information by groupings of areas other than those originally used in establishing survey working units.

Fig. 2. Virgin longleaf pine at its best. Photograph taken in Southern Mississippi. The published reports of the Southern Forest Survey will show the volume of virgin longleaf pine in the South.

As soon as office analysis of data is completed for any survey unit, preliminary reports will be prepared for immediate publication. Each of these reports will give the following essential survey information for release units of at least 4 million acres.

(a) Area of non-forest land; classified as agricultural under cultivation, idle, abandoned and pasture; railroads, and other rights-of-way; towns and villages; waterways, marsh and prairie; (b) Area of forest land by forest types and forest conditions; (c) Stand tables, by types and conditions, showing the number, size, and species of trees upon the average acre; (d) Volume of saw tim-

ber by species; quantities of poles by A.S.A. classes, piling, pulpwood, and fuelwood; (e) The number of crops of turpentine trees in operation, the number of crops that can be hung on existing trees and the future supply of timber for turpentining.

Following publication of the preliminary reports, additional reports giving results of studies of growth, depletion and requirements will be prepared and published as fast as facilities will permit. Further studies of the forest economics of each region covered by the survey will be made and the results published when major forest regions or whole states have been covered by the survey.

The survey of the South is being directed by Capt. I. F. Eldredge, a forester of many years' experience in the South as a part of the activity of the Southern Forest Experiment Station, E. I. Demmon, Director, 600 Stern Building, 348 Baronne Street, New Orleans, La.

Fig. 3. Aerial photograph of bottomland hardwood area in Louisiana showing the location of a survey line and plots established at 660 foot intervals.